

ASG-Manager Products™ **Advanced Status**

Version 2.5

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Preface

This *ASG-Manager Products Advanced Status* is one of a series describing the ASG-Manager Products (herein called Manager Products) for use on IBM System/370, 30xx, and 4300 series, and plug compatible machines.

ASG welcomes your comments, as a preferred or prospective customer, on this publication or on the Manager Products family.

About this Publication

The *ASG-Manager Products Advanced Status* consists of these chapters:

- Chapter 1, "Accessing, Listing, and Working in a Status," provides the basic commands for accessing, listing, and working in a Status.
- Chapter 2, "Status Related Interrogation," describes additional keywords for use with a number of dictionary management commands.
- Chapter 3, "The Status Window Feature," explains the Status Window command, its options, and its uses.
- Chapter 4, "Updating in a Status," provides guidance for working in an Update status.
- Chapter 5, "The Effect of Status on Other Manager Products Commands," lists the possible effects of Advanced Status on other Manager Products commands.

Publication Conventions

ASG's technical publications use these conventions:

| Convention | Represents |
|-----------------------------------|--|
| ALL CAPITALS | Directory, path, file, dataset, member, database, program, command, and parameter names. |
| Initial Capitals on Each Word | Window, field, field group, check box, button, panel (or screen), option names, and names of keys. A plus sign (+) is inserted for key combinations (e.g., Alt+Tab). |
| <i>lowercase italic monospace</i> | Information that you provide according to your particular situation. For example, you would replace <i>filename</i> with the actual name of the file. |
| Monospace | Characters you must type exactly as they are shown. Code, JCL, file listings, or command/statement syntax. Also used for denoting brief examples in a paragraph. |

1

Accessing, Listing, and Working in a Status

Accessing a Status

To display the name of your current status, enter:

```
STATUS ;
```

To access a status or to move from your current status into another, enter:

```
STATUS status-name ;
```

where *status-name* need not be enclosed in delimiters unless it includes characters from the extended character set or it conflicts with a STATUS command variant (for example, a status named LIST would conflict with a STATUS LIST command).

The Dictionary Controller is responsible for creating statuses, naming them, and maintaining the relationships between them.

The Controller may specify a *default status*. This is the status into which you are taken automatically each time you access the dictionary.

Whatever the effective default, you can change it to suit your needs by putting the appropriate STATUS command into your User Defined Profile (together with the appropriate DICTIONARY and AUTHORITY commands). The commands will be executed automatically each time you log on to Manager Products.

Refer to the *ASG-ControlManager User's Guide* for details of User Defined Profiles, and the rules governing status names.

Refer to the *ASG-Manager Products Controller's Manual* for details of creating and organizing statuses.

Listing Statuses in a Dictionary

The *STATUS LIST* Command

To obtain a detailed list of the statuses available to you, enter:

```
STATUS LIST;
```

If, in addition to a list, you want a diagram that represents the statuses available to you and the relationship between them, enter:

```
STATUS LIST GIVING DISPLAY;
```

To display the status diagram without the list, enter:

```
STATUS LIST GIVING DISPLAY ONLY;
```

Output from STATUS LIST commands reflects the statuses that are available to you, rather than all statuses in the dictionary.

The Systems Administrator may have tailored your status environment so that statuses not relevant to your work, (those used by other departments, for example) are excluded.

Refer to "The Effect of Unavailable Statuses" on page 5 for details of the effect on output from STATUS LIST commands of statuses that are not available to you.

Syntax

$$\left\{ \begin{array}{l} \text{STATUS} \\ \text{ST} \end{array} \right\} \text{ LIST } [\text{GIVING DISPLAY } [\text{ONLY}]] \left\{ \begin{array}{l} ; \\ . \end{array} \right\}$$

List Output

STATUS LIST and STATUS LIST GIVING DISPLAY commands both produce a detailed list of the statuses currently available to you. Both commands also output additional information which is tabulated against the list of status names.

It is likely that the table will exceed the width of your screen. You will need to scroll in order to see all of the output.

The title of each column and a description of its contents are given below:

| Column Title | Description |
|----------------------|--|
| STATUS NAME | Status name. |
| TYPE | Indicates whether the status is a root status or a dependent status. |
| LEVEL | Indicates the level of the status within a status hierarchy. Root statuses are always 1; their direct dependents 2; and so on. Where several status hierarchies are listed the level number returns to 1 for each root status. |
| DEP TOT/DIR | The total number of direct and indirect dependent statuses (TOT) for each status, and the number of direct (DIR) dependents. |
| READ-ONLY DATE/TIME | For statuses which are currently read-only statuses, this column indicates the date and time that they were designated read-only. For statuses which are currently update statuses this column will indicate UPDATE and no date/time will be given. Note: _____ The Systems Administrator may limit the statuses that you can update by setting an update limit on your Status Window. Consequently, you may find that you cannot update some statuses which other users can update and when you use the STATUS LIST command those statuses are listed as READ-ONLY statuses. |
| NAMED DATE/TIME | Date and time the named status was created. |
| READ-BASED DATE/TIME | If the direct and indirect base statuses of the listed statuses are all read-only statuses, this column indicates the date and time at which they became so. If any of the direct and indirect base statuses are update statuses, no date/time is given. Note: _____ The listed status itself may be an update status or a read-only status. As long as its direct and indirect base statuses are read-only a date/time will be given. |

The following details are appended to the list:

| | |
|-----------------|---|
| DEFAULT | The name of the dictionary default status. |
| STATUSES LISTED | The number of statuses listed is given in total and then broken down into read-only statuses, update statuses, root statuses, and dependent statuses. |

This concludes the description of the list output produced by STATUS LIST and STATUS LIST GIVING DISPLAY commands.

Diagram Output

Figure 1 on page 4 provides an example of the diagram produced by a STATUS LIST GIVING DISPLAY command.

Note:

The level indicators to the right of Figure 1 on page 4 are not part of the STATUS LIST command output. They are included here to assist you in interpreting the example.

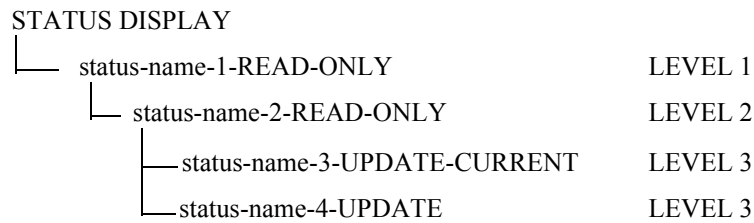


Figure 1. STATUS LIST Output: display/diagram

You can see the way that the diagram represents a status structure by comparing it to Figure 2 on page 4.

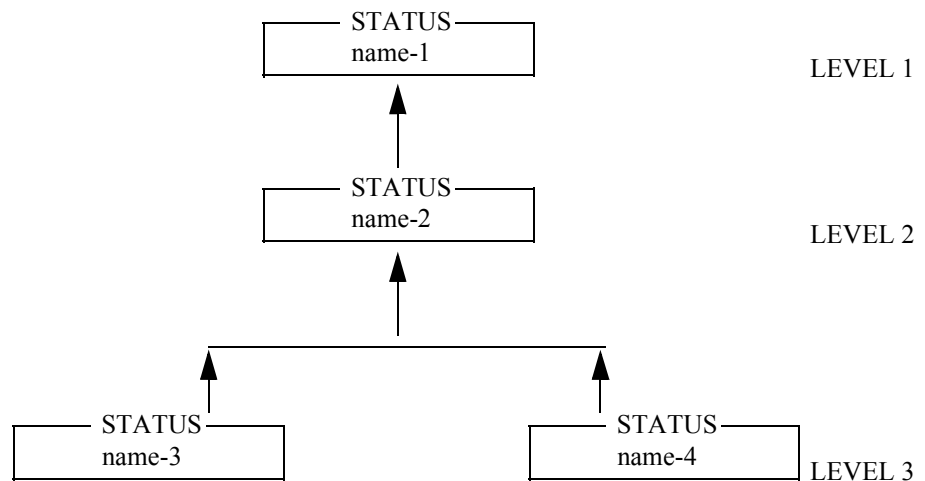


Figure 2. STATUS LIST Output: conventional representation

The command also produces a list of the statuses, in the same format as that produced by STATUS LIST, describing the status structure displayed.

The Effect of Unavailable Statuses

The Systems Administrator may have tailored your status environment so that statuses not relevant to your work (those used by other departments, for example) are excluded.

If this is the case, the excluded statuses will not be included in the output from any STATUS LIST command you enter.

Any gaps that would occur in STATUS LIST output because of excluded statuses are automatically closed-up by ASG-ControlManager (herein called ControlManager). You are presented with a clear view of the statuses available to you and the hierarchical relationship between them.

For example, a user to whom all statuses of the dictionary are available, might receive output from a STATUS LIST GIVING DISPLAY command as illustrated in Figure 3 on page 5.

```
STATUS DISPLAY
├── HIST-READ-ONLY
│   └── LIVE-READ-ONLY
│       └── DEV1-UPDATE-CURRENT-DEFAULT
```

| STATUS LIST | | | |
|-------------|-----------|-------|---------|
| STATUS-NAME | TYPE | LEVEL | TOT/DIR |
| HIST | ROOT | 1 | 2/1 |
| LIVE | DEPENDENT | 2 | 1/1 |
| DEV1 | DEPENDENT | 3 | 0/0 |

```

DEFAULT STATUS IS DEV1
3  STATUSES LISTED
2  READ-ONLY STATUSES
1  UPDATE STATUSES
1  ROOT STATUSES
2  DEPENDENT STATUSES

```

Figure 3. STATUS LIST Output: all statuses are listed

However, another user to whom only statuses LIVE and DEV 1 are available would receive output in response to the same command as illustrated in Figure 4 on page 6.

```
STATUS DISPLAY
└─ LIVE-READ-ONLY
    └─ DEV1-UPDATE-CURRENT

STATUS LIST
STATUS-NAME      TYPE      LEVEL      TOT/DIR
LIVE             ROOT      1          2/1
DEV1             DEPENDENT 2          0/0

DEFAULT STATUS IS DEV1
2  STATUSES LISTED
1  READ-ONLY STATUS
1  UPDATE STATUSES
1  ROOT STATUSES
1  DEPENDENT STATUS
```

Figure 4. STATUS LIST Output: some statuses are listed

As you can see, the respective details are adjusted so that the available statuses and the hierarchical relationships between them are clearly represented.

So, when you use a STATUS LIST command, the status structure listed and displayed is the one available to you. The status structure available to you is not necessarily the same as the physical status structure of the dictionary.

The Systems Administrator limits the statuses available to you by placing a maximum limit on the range of your Status Window.

Refer to "Maximum and Minimum Window Range" on page 33 for details of maximum limits on the Status Window.

The View of the Dictionary from your Current Status

The status in which you are working at any point in time is your *current status*.

The view from your current status determines which entity/data definitions are available to you, for the purpose of most dictionary activities. That view consists of:

- New members added to the dictionary in the current status
- Re-definitions in the current status of members also defined in its direct and/or indirect base statuses
- The first definition found for members with no definition in the current status, looking first in its direct base status and then each indirect base in turn, down to the root status.

You can only update members that are visible from your current status (if it is an update status), and the response to most interrogations reflects that view. Similarly, most documentation and manipulation commands apply only to the members visible from your current status.

However, some activities do involve reference to a wider range of statuses than those included in the view from your current status:

- Whenever you attempt to add, remove, or rename members, ControlManager automatically checks all statuses in the dictionary for a member of the same name. If it finds one, in the case of adding and renaming members, it will reject your commands in order to prevent duplicate member names being added to the dictionary. In the case of removing members, it may issue warning or error messages depending upon which other statuses the member you are attempting to remove exists in.
- It may form an integral part of your work in a status to obtain information which is not normally visible from it (comparing entity/data definitions across projects, for example) and certain forms of status related interrogation are provided to enable you to do so. The Status Window feature enables you and/or the Systems Administrator to control the range of statuses to which such interrogations apply.

The Status Window feature also enables the Systems Administrator to control the range of statuses that you can list (using the STATUS LIST command) and update (using any Manager Products source-updating command). Consequently, when you list the statuses in the dictionary you may only see those statuses that are relevant to your work. And, you may find that you have read-only access to some statuses to which other users have update access.

You may, within limits established by the Systems Administrator, be able to adjust your Status Window.

Refer to *ASG-Manager Products Status Concepts* for further explanation and illustrations about the view of the dictionary from a status.

Refer to Chapter 2, "Status Related Interrogation," on page 9 for details of interrogating the dictionary from a status.

Refer to Chapter 3, "The Status Window Feature," on page 25 for details of the Status Window feature.

Refer to Chapter 4, "Updating in a Status," on page 41 for details about renaming and removing members from a status.

2

Status Related Interrogation

Interrogating the Dictionary from a Status

You can use any Manager Products dictionary management interrogation or documentation command to interrogate and report from the dictionary in your current status. The commands will apply only to members that are included in the view from your current Status. They are used in exactly the same way as they are used when no Status facility is installed.

However, Advanced Status provides additional keywords, for use with a number of dictionary management commands, which enable you to select members that meet specific status-related-selection criteria and to obtain information about members that may or may not be visible from your current status.

Status related interrogation can be made in three ways:

- Comparing statuses using *status-related-selection*. For example, the status- related-selection keyword DIVERGING, enables you to select members visible from the current status that also exist in at least one other status where they are not visible from the current status.
- Using the status option in the *time-and-user-related selection* clause to select members introduced, encoded, or amended in a given status and, optionally, by a given user at a given date/time.
- Using the ALL-STATUSES keyword or the LIST HISTORY command to obtain information about members from each of the statuses available to you, in which they exist.

Interrogations apply to all *member/index-names*; that is, all valid member names and those members' aliases, catalog classifications, and user defined indexed attributes.

Note:

When specifying a status name within a command, you need not enclose it within delimiters unless it includes characters from the extended character set or it conflicts with a STATUS command variant (for example, a status named LIST would conflict with a STATUS LIST command).

Refer to the *ASG-ControlManager User's Guide* for details of the rules governing status names.

Refer to "The View of the Dictionary from your Current Status" on page 6 for details of the view from your current status.

Refer to Chapter 4, "Updating in a Status," on page 41 for details of updating in a status.

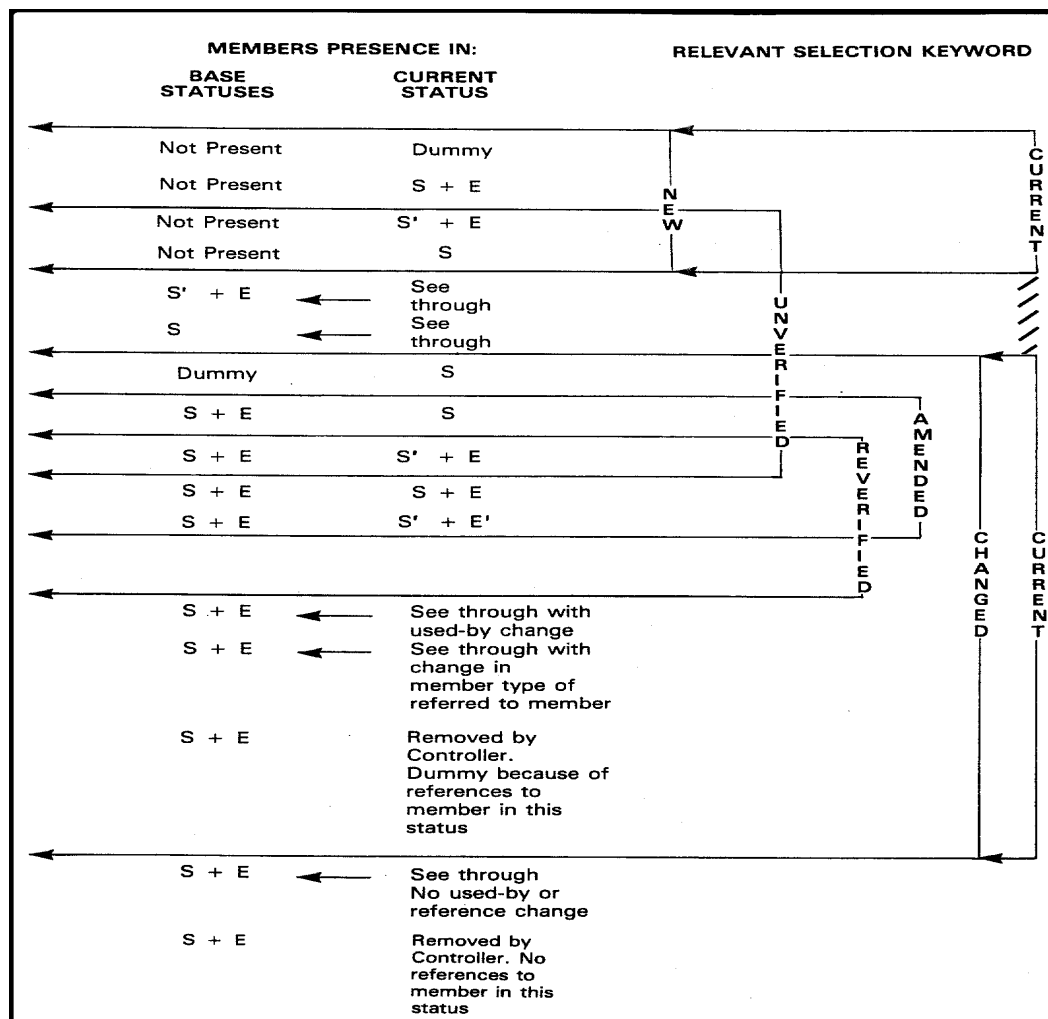


Figure 5. Table: status related selection keywords

Key

| | |
|----|--|
| S | Source record present in this status |
| E | Encoded record for S present in this status |
| S' | A source record, S, was present in this status, and an updated version, S' is now present in this status |
| E' | Encoded record for S present in this status. |

Except in the case of REVERIFIED (which requires an encoded record to be present in a direct or indirect base status) an encoded record need not exist in the direct or indirect base status. So, the entry S + E should be interpreted as S [+E].

Comparing Statuses

Overview

Status-related-selection enables you to select member/index-names by comparing statuses.

To use status-related-selection, enter:

```
command-name status-related-selection selection ;
```

where:

command-name is any Manager Products command with which status-related-selection can be used

status-related-selection is one or more of the following keywords:

- AMENDED
- CHANGED
- CURRENT
- DIVERGING
- NEW
- REVERIFIED
- SIGNIFICANT
- UNVERIFIED.

Several keywords can be specified in one command if they are separated by commas.

selection is optional and may be any other selection criteria valid for use with the specified command.

Member/index-names that meet one or more of the specified status-related-selection criteria are selected, provided that they also meet any other selection criteria specified in the command.

Member/index-names are all valid member-names, and those members' aliases, catalog classifications, and user defined indexed attributes.

Figure 5 on page 10 tabulates the selection made by each keyword, but note the following:

- The status-related-selection keywords DIVERGING and SIGNIFICANT do not appear
- CURRENT appears twice. The characters used to indicate the continuation of the first occurrence to the second (///) serve no other purpose other than indicating that there is a continuation.

Further details of the keywords are given in the following sections.

Refer to "Complex Interrogations" on page 24 for details of the commands with which status-related-selection can be used.

CURRENT

This keyword enables you to select member/index-names that physically exist (as encoded records, source records, dummy records, or usage-tables) in the current status.

Members that are visible from the current status, but do not physically exist in it, are not selected. For example:

```
LIST CURRENT ITEMS ;
```

will produce a list of all ITEM member types that have a record in the current status.

Three additional keywords are available which enable you to refine the selection made by CURRENT. These are:

- DEFINITIONS
- SOURCE-RECORDS
- USAGE-TABLES.

CURRENT DEFINITIONS will only select members that have an encoded record in the current status.

CURRENT SOURCE-RECORDS will only select members that have a source record (encoded or unencoded) in the current status.

CURRENT USAGE-TABLES will only select member/index-names which exist in the current status as either:

- Usage-tables only
- Usage-tables and unencoded source records
- Dummy records only
- Dummy records and unencoded source records.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of the condition (encoded, source, etc.) of members in a status.

Refer to "Complex Interrogations" on page 24 for details of the commands with which status-related-selection keywords can be used.

NEW

This keyword enables you to select member/index-names that physically exist (as encoded records, source records, dummy records, or usage-tables) in the current status, but not in any of its direct and indirect base statuses.

For example:

LIST NEW ITEMS ;

produces a list of all ITEM member types which physically exist in the current status, but not in any of its base statuses.

Member/index-names are all valid member names, and those members' aliases, catalog classifications, and user defined indexed attributes.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of the condition (encoded, source, etc.) of members in a status.

Refer to "Complex Interrogations" on page 24 for details of the commands with which status-related-selection keywords can be used.

CHANGED

This keyword enables you to select member/index-names whose condition in the current status has changed when compared with the nearest direct or indirect base status, in which it exists. Examples of the selection made by CHANGED are given below.

If you specify the additional keyword TYPES, then CHANGED will only select members whose member-type has changed in the current status when compared with the nearest direct or indirect base status in which they exist. If the member does not exist in a direct or indirect base status it will not be selected.

For example:

LIST CHANGED TYPES ITEMS ;

selects ITEM member-types in the current status that are a different member-type in the nearest direct or indirect base status in which they exist.

These are examples of member/index-names selected by CHANGED:

- Members with a source record in both the current status and in a direct and/or indirect base of the current status
- Members which directly refer to another member whose member-type has changed in the current status when compared with the nearest direct or indirect base status in which it exists
- Members directly referred to by another member whose member-type has changed in the current status when compared with the nearest direct or indirect base status in which it exists
- Members which have an unencoded source record in the current status and a dummy record in one of its direct and/or indirect base statuses
- Members directly referred to by a different set of members in the current status when compared with the nearest direct or indirect base status in which they exist
- Members directly referred to by the same set of members in the current status when compared with the nearest direct or indirect base status in which they exist, with the exception that one of those references is from a different clause in the referring member's data definition statement
- Any alias which is the alias of a different set of members in the current status when compared to the nearest direct or indirect base status in which it exists
- Any alias whose alias-type or number differs in the current status when compared with the nearest direct or indirect base status in which it exists
- Catalog classifications or attributes which relate to a different set of members in the current status when compared with the nearest direct or indirect base status in which they exist.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of the condition (encoded, source, etc.) of members in a status.

Refer to "Complex Interrogations" on page 24 for details of the commands with which status-related-selection keywords can be used.

AMENDED and REVERIFIED

AMENDED. This keyword enables you to select members that have a *source record* (encoded or unencoded) in the current status and at least one of its direct and indirect base statuses.

REVERIFIED. This keyword enables you to select members that have an *encoded record* in the current status and at least one of its direct and indirect base statuses.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of the condition (encoded, source, etc.) of members in a status.

Refer to "Complex Interrogations" on page 24 for details of the commands with which status-related-selection keywords can be used.

DIVERGING

This keyword enables you to select member/index-names that satisfy all of the following conditions:

- They exist in at least two statuses within the Status Window for Diverging which are not direct or indirect base and dependent statuses of each other
- They are visible from the current status (unless you also use the ALL-STATUSES keyword).

This enables you to compare entity/data definitions across departments/projects.

Three additional keywords are available which enable you to refine the selection made by DIVERGING. These are:

- TYPES
- DEFINITIONS
- SOURCE-RECORDS.

DIVERGING TYPES enables you to select member/index-names that have diverging member type; that is, the member type is different in at least two statuses within the Status Window for Diverging, which are not direct or indirect base and dependent statuses of each other, and it is visible from the current status.

DIVERGING DEFINITIONS enables you to select members with diverging encoded records.

DIVERGING SOURCE-RECORDS enables you to select members with diverging source records.

Note: _____

You may be able to adjust your Status Window in order to limit or extend the range of statuses included in the Status Window for Diverging.

EXAMPLES

For the following examples please assume, unless it is otherwise stated, that:

- DEV1 is the current status
- All statuses represented are included in the Status Window for Diverging
- mem-1 is an ITEM member type in all statuses indicated and it does not exist in any other statuses.

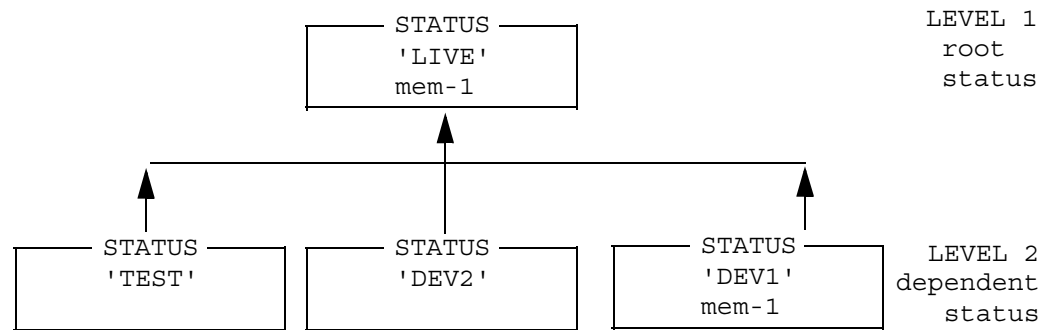


Figure 6. DIVERGING: Example 1

Example 1: The statuses in the dictionary are organized as represented in Figure 6 on page 16.

Command: LIST DIVERGING ITEMS ;

Response: mem-1 is *not selected*. Although it is an ITEM member type and it exists in two statuses, those statuses have a direct base/dependent relationship.

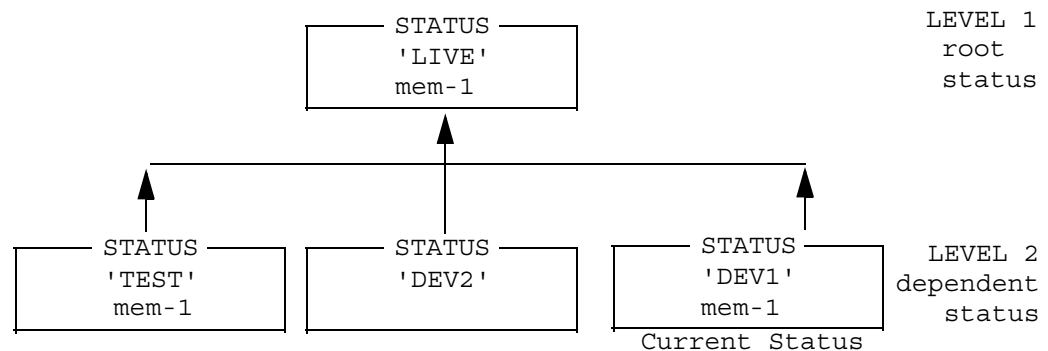


Figure 7. DIVERGING: Example 2

Example 2: The statuses in the dictionary are organized as represented in Figure 7 on page 16.

Command: LIST DIVERGING ITEMS ;

Response: mem-1 is *selected*. It is visible from the current status as an ITEM member type and it exists in at least two statuses (one of which happens to be the current status) which are not the direct or indirect base or dependent status of the other.

The above example represents a typical situation in which two development teams record different definitions of the same member based upon its definition in the base status (which reflects its condition in the current system). Thus the dictionary contains *diverging* definitions of that member.

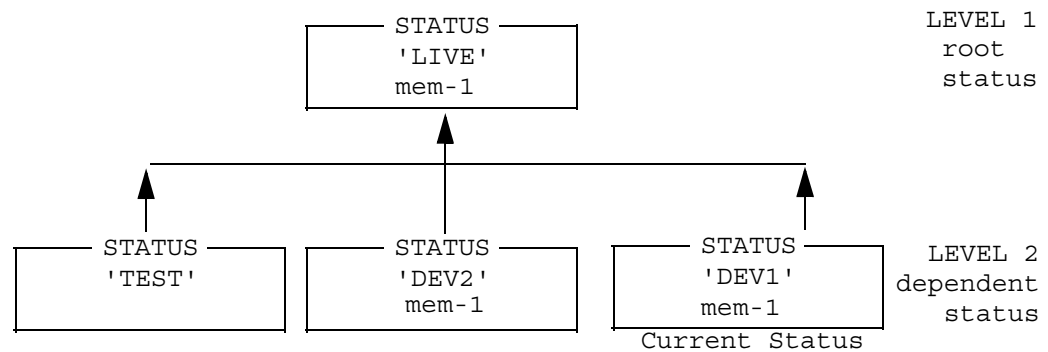


Figure 8. DIVERGING: Example 3

Example 3: The statuses in the dictionary are organized as represented in Figure 8 on page 17.

Command: LIST DIVERGING SOURCE-RECORDS ;

Response: mem-1 is *not selected*. Although it is diverging, it does not have diverging source records. It only has source records in statuses 'DEV1' and 'LIVE' which have a base/dependent relationship. It also exists in status 'TEST' but only as a usage-table.

This concludes the examples of members selected by the status-related-selection keyword DIVERGING.

Refer to "The ALL-STATUSES Keyword" on page 21 for details of the ALL-STATUSES keyword.

Refer to "Complex Interrogations" on page 24 for details of the commands with which status-related-selection keywords can be used.

UNVERIFIED

This keyword enables you to select members visible from the current status that have either:

- An unencoded source record
- A source record that differs from the encoded record; that is, the source record has been altered since the member was last successfully encoded.

Members which are dummy records only (that is, they have no source record) are not selected by UNVERIFIED.

Members whose condition is unverified are identified in output from a LIST command by an asterisk (*) and the entry SCE in the CONDITION column.

When you PRINT or BULK-PRINT members of the dictionary a message is displayed if they are unverified.

LIST command output indicates dummy members by an asterisk (*) and the entry 'DUM' in the CONDITION column.

Note: _____

The REINSTATE command enables you to remove unverified source records, thus reinstating a member in the condition in which it was last successfully encoded.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of the condition (encoded, source, etc.) of members in a status and for details of LIST command output.

Refer to "Complex Interrogations" on page 24 for details of the commands with which status-related-selection keywords can be used.

SIGNIFICANT

This keyword can be used in conjunction with the GLOSSARY command.

If SIGNIFICANT is specified in a GLOSSARY command then only those members containing the clause specified in that command are selected.

For example:

```
GLOSSARY SIGNIFICANT ITEMS GIVING NOTES ;
```

only selects those ITEMS that have a NOTE clause. ITEMS without a NOTE clause are not selected.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of the GLOSSARY command.

Selecting Members Introduced in a Given Status

The status option in the time-and-user-related-selection clause enables you to select members that have been introduced into a given status. To do so, enter:

```
command IF INTRODUCED IN STATUS status-name ;
```

These are selected if no other selection criteria is specified in the command:

- Members with source records in the named status
- Members with dummy records in the named status
- Aliases, catalog classifications, or user defined indexed attributes in the named status.

To select members not introduced into a given status, enter:

```
command IF NOT INTRODUCED IN status-name ;
```

You can also select members that were/were not introduced by a given *user* on a given *date/time*. For example:

```
command IF [NOT] INTRODUCED BY user-id ON date AT time
        IN STATUS status-name ;
```

Examples:

```
LIST ITEMS IF NOT INTRODUCED IN STATUS LIVE ;
```

```
LIST IF INTRODUCED ON '12 DEC 1985' IN STATUS LIVE ;
```

```
LIST IF INTRODUCED BY HARRIS ON '27 APR 1985'
        AT '09.00.00'
        IN STATUS LIVE ;
```

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of time-and-user-related-selection.

Refer to "Complex Interrogations" on page 24 for details of the commands with which the time-and-user-related-selection clause can be used.

Refer to the *ASG-ControlManager User's Guide* for details of the rules governing status names.

Selecting Members with Source Record Changes in a Given Status

The status option in the time-and-user-related-selection clause enables you to select members whose source records were amended in a given status. To do so, enter:

```
command IF AMENDED IN STATUS status-name ;
```

To select members whose source records were not amended in a given status, enter:

```
command IF NOT AMENDED IN STATUS status-name ;
```

Amended in this context means any members processed by the ALTER, MODIFY, MERGE, REPLACE or UPDATE and FILE/SFILE/RFILE commands, in the specified status. Members introduced into a status using the ADD command are not selected.

You can also select members whose source records were/were not amended by a given *user* on a given *date/time*. To do so enter:

```
command IF [NOT] AMENDED BY user-id ON date AT time IN STATUS
        status-name ;
```

Examples:

```
LIST ITEMS IF NOT AMENDED IN STATUS LIVE ;
```

```
LIST IF AMENDED ON  '12 DEC 1985' IN STATUS LIVE ;

LIST IF AMENDED BY HARRIS ON '12 DEC 1985'
                        AT  '09.20.01'
                        IN STATUS LIVE
```

Aliases, catalog classifications, and user defined indexed attributes are not selected by IF AMENDED, but they are selected by IF NOT AMENDED.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of time-and-user-related-selection.

Refer to "Complex Interrogations" on page 24 for details of the commands with which the time-and-user-related-selection clause can be used.

Refer to the *ASG-ControlManager User's Guide* for details of the rules governing status names.

Selecting Members Encoded in a Given Status

The status option in the time-and-user-related-selection clause enables you to select members that are encoded in a given status. To do so, enter:

```
command IF VERIFIED IN STATUS status-name ;
```

To select members not encoded in a given status, enter:

```
command IF NOT VERIFIED IN status-name ;
```

You can also select members that were encoded/not encoded by a given user on a given date/time. For example:

```
command IF [NOT] AMENDED BY user-id ON date AT time IN STATUS
status-name ;
```

Examples:

```
LIST ITEMS IF NOT VERIFIED IN STATUS LIVE ;

LIST IF VERIFIED ON '12 DEC 1985' IN STATUS LIVE ;

LIST IF VERIFIED BY HARRIS ON '12 DEC 1985' AT 14.20.01
      IN STATUS LIVE ;
```

Aliases, catalog classifications, and user defined indexed attributes are not selected by IF VERIFIED, but they are selected by IF NOT VERIFIED.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of time-and-user-related-selection.

Refer to "Complex Interrogations" on page 24 for details of the commands with which the time-and-user-related-selection clause can be used.

Refer to the *ASG-ControlManager User's Guide* for details of the rules governing status names.

The ALL-STATUSES Keyword

This keyword can be used with the REPORT, BULK REPORT, LIST, PRINT, BULK PRINT, and GLOSSARY commands. It enables you to apply any of the selection criteria valid for use with these commands, to all statuses within your Status Window for Selection, and to obtain details of selected members, from all statuses within your Status Window for Output.

Examples:

```
PRINT member-name ALL STATUSES ;
```

```
LIST ALL-STATUSES IF AMENDED BY 'HARRIS' ON  
                        '25 DEC 1985' ;
```

```
GLOSSARY ALL-STATUSES OBSOLETE-DEFINITIONS GIVING SEE ;
```

Members are selected if they meet the specified selection criteria in at least one status within your Status Window for Selection.

Details of selected members are output from every status, within your Status Window for Output, in which they exist.

The selection and output of members, from within your Status Window, varies according to the command you use:

```
REPORT member-name ALL-STATUSES ;
```

```
BULK REPORT ALL-STATUSES selection ;
```

and

```
GLOSSARY ALL-STATUSES selection ;
```

select and output details of encoded and dummy member/index-names, only.

```
PRINT member-name ALL-STATUSES ;
```

and

```
BULK PRINT ALL-STATUSES selection ;
```

select members with source records and output details of selected members from statuses in which they have source records.

```
LIST ALL-STATUSES selection ;
```

selects all member/index-names whatever their condition (source, encoded, etc.) in a status.

If the Audit and Security facility (selectable unit CMR-DD3) is installed, output from a LIST command normally includes ownership and protection details for the listed members. If the ALL-STATUSES keyword is used then the names of the statuses in which the listed members reside, are displayed in place of ownership and protection details. And, an indication is given as to whether you have read-only access to the listed members and if you can update and/or remove them.

As supplied by ASG, the default window-range of the Status Window for Selection and for Output is LATEST-VISIBLE-OCCURRENCE and DICTIONARY, respectively.

This means that when you use the ALL-STATUSES keyword a member must be visible from the current status in order to be selected. If it is selected then details will be produced from all statuses in the dictionary in which it exists.

Note: _____

If the Status Window has been adjusted (by you and/or the Systems Administrator) the performance of the ALL-STATUSES keyword will differ.

For example, the Status Window could be adjusted so that although a member is selected if it is visible from the current Status, details of selected members are output only from the direct and indirect base and dependent statuses of the current status. The presence of selected members in other statuses is effectively ignored for the purpose of output.

Thus, when you are using the Advanced Status facility, the range of statuses that constitute 'all statuses' is defined as those statuses within your current Status Window and this may include only a subset of all statuses physically present in the dictionary.

You may be able to adjust your Status Window in order to extend the range of statuses from which members are selected, or to limit the range of statuses from which details of selected members are output. However, your ability to do so is controlled by the Systems Administrator who may change the default setting supplied by ASG and limit the extent to which you can adjust it.

Refer to Chapter 3, "The Status Window Feature," on page 25 for details of the Status Window feature.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of the condition (source, encoded, etc.) of a member in a status and for details of any of the above mentioned commands.

The LIST HISTORY Command

To produce a list of the statuses in which a selection of member/index-names exist, enter:

```
LIST HISTORY selection ;
```

where *selection* is optional and may be any selection criteria valid for use with the LIST command.

Examples:

```
LIST HISTORY MEMBER EMP-CODE ;
```

```
LIST HISTORY ONLY E ;
```

```
LIST HISTORY IF UNVERIFIED IN STATUS LIVE ;
```

Members are selected if they meet the specified selection criteria in at least one status in the Status Window for Selection. Details of selected members are output from all statuses in the Status Window for Output in which they exist.

Details output by the LIST HISTORY command include:

- The name of each status in which the member exists
- The members' member type in each status
- The date and time the member was inserted in each status
- The condition of the members' record in each status; that is, whether the member is an encoded record, a source record, or a dummy record
- The read-only or update disposition of each status.

If the Audit and Security facility (selectable unit CMR-DD3) is installed, output will also indicate if a member can be accessed, altered, or removed.

You may be able to adjust your Status Window in order to extend the range of statuses from which members are selected, or to limit the range of statuses from which details of selected members are output.

Note: _____

Member/index-names are all valid member names, and those members' aliases, catalog classifications, and user defined indexed attributes.

Refer to Chapter 3, "The Status Window Feature," on page 25 for further details of the Status Window.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of the LIST command.

Complex Interrogations

Status-related-selection keywords and the time-and-user-related-selection clause are valid for use with the following commands:

- BULK-PRINT
- BULK-REPORT
- BULK-ENCODE
- GLOSSARY
- LIST
- PERFORM
- WHICH.

Several status-related-selection criteria and/or several time-and-user-related-selection criteria can be combined in these commands (together with any other selection criteria permissible with each command) to form complex dictionary interrogations.

The ALL-STATUSES keyword can be combined with status-related-selection and time-and-user-related-selection in the LIST command.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of the above commands.

Examples:

```
LIST HISTORY IF AMENDED IN STATUS LIVE ;
```

```
GLOSS CURRENT ITEMS IF AMENDED BY FRED ON '23 SEP 85' ;
```

```
BULK PRINT CURRENT ITEMS IF AMENDED BY HARRIS ON  
      '23 SEP 85' OR AMENDED BY SMITHSON ON  
      '23 SEP 85'
```

```
WHICH FILES IF INTRODUCED BEFORE '23 SEP 84'  
      BELONG-TO PERSONNEL ;
```

```
LIST ALL-STATUSES DIVERGING GROUPS TOTALS-ONLY ;
```

```
LIST ALL-STATUSES IF AMENDED BY GMC IN STATUS LIVE  
      NO-USAGE ;
```

3

The Status Window Feature

The Purpose of the Status Window Feature

The Status Window feature enables you and/or the Systems Administrator to control the range of statuses that are processed when you use the following status-related commands and/or keywords:

- LIST HISTORY
- ALL-STATUSES
- DIVERGING.

While the response to most interrogation commands reflects the view from the current status, the above commands enable you to obtain information which may not be visible from the current status. They enable you to compare entity/data definitions across projects/departments.

However, while there may be a need to compare the definitions recorded by one project team with those recorded by another, the dictionary may include statuses used by yet other project teams with which comparison is not required. By adjusting the Status Window you and/or the Systems Administrator can define the range of statuses to be processed when you use the above commands and keywords.

Thus, only relevant statuses are processed and non-relevant statuses are effectively ignored. If the situation changes, the range of your Status Window can be adjusted accordingly. It can be adjusted in order to process a different range of statuses for each of the above mentioned commands/keywords. And, the Status Window can be adjusted to suit the requirements of individuals and groups of users.

How It Works

Each user of Manager Products has a Status Window—provided that the Advanced Status facility is installed. It consists of three parts called Window Types, each of which controls a particular status-related activity. Using the STATUS WINDOW command the range of statuses processed by each Window Type can be specified and the activity to which each relates will subsequently operate within that range of statuses.

Your ability to adjust the range of your own Status Window is controlled by the Systems Administrator who may impose maximum and minimum limits on the range of statuses that you may specify for each Window Type. The Systems Administrator may also alter the default Status Window as supplied by ASG.

Typically, the Systems Administrator will include an appropriate STATUS WINDOW command in your Logon Profile or, for groups of users, in a Global Profile or Corporate Executive Routine, so that your Status Window is automatically set up, as required, when you access the dictionary. However, you may also be able to adjust it—this all depends upon how the Status Window feature is implemented at your installation.

In Figure 9 on page 26, the range of the Status Window includes all statuses in the dictionary.

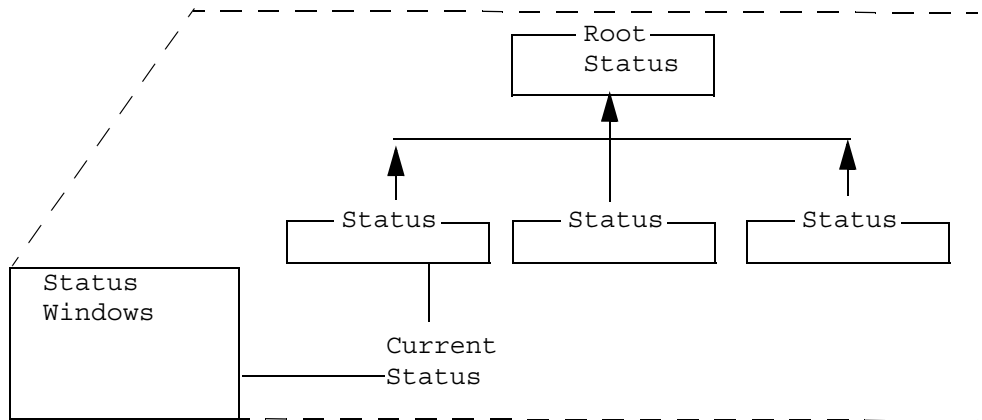


Figure 9. The Status Window: Illustration 1

In Figure 10 on page 26, the Status Window includes all but one status in the dictionary.

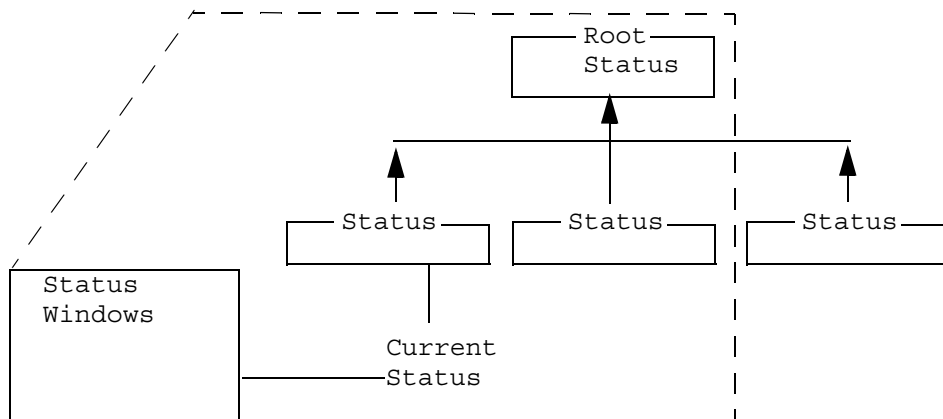


Figure 10. The Status Window: Illustration 2

Status Window Types

The Status Window is made up of several parts or Window Types, each of which controls the range of statuses in which a particular type of activity operates. The Window Types and the activities controlled by each are as follows:

| Window Type | Activities Controlled |
|-------------|---|
| SELECTION | The Status Window for Selection controls the range of statuses from which members are selected when you use the ALL-STATUSES keyword and the LIST HISTORY command. |
| OUTPUT | The Status Window for Output controls the range of statuses from which details of members selected by the ALL-STATUSES keyword and the LIST HISTORY command are output. |
| DIVERGING | The Status Window for Diverging controls the range of statuses which are searched for the existence of specified members when you are using the status-related-selection keyword DIVERGING. |

As supplied by ASG, each Window Type operates within a default range of statuses. However, the ASG-supplied default may have been changed by the Systems Administrator via your Logon Profile, a Global Profile, or a Corporate Executive Routine.

Refer to "The Default Status Window" on page 34 for details of the default Status Window.

The STATUS WINDOW Command

This command enables you to adjust the Status Window within limits established by the Systems Administrator.

The basic syntax of the command is:

```
STATUS WINDOW FOR window-type IS window-range ;
```

where:

window-type is SELECTION, OUTPUT, and/or DIVERGING. Each indicates a particular type of activity controlled by the Status Window. Several Window Types may be specified in one command but they must be separated by commas.

window-range is DICTIONARY, ROOT, BASE, CURRENT, ONLY status-id-clause, BRANCH status-name, or LATEST-VISIBLE-OCCURRENCE. Each defines a different range of statuses.

To specify one Window Range for all of the activities controlled by the Status Window, enter:

```
STATUS WINDOW IS window-range ;
```

Once a STATUS WINDOW command has been successfully executed, the activity to which the specified window-type/s relate will operate within the range of statuses defined by the specified window-range.

A Status Window command is effective for the current session only. However, if you enter a STATUS WINDOW command into your User Defined Profile, the Status Window will be set up as specified in that command, each time that you Logon subsequently.

The extent to which you can adjust your Status Window is controlled by the Systems Administrator who may impose a maximum and/or minimum limit on the range of statuses you may include in it.

Refer to "Status Window Types" on page 27 for details of Window Types.

Refer to "Status Window Range" on page 29 for details of Window Ranges.

Refer to "Examples - Adjusting the Status Window" on page 35 for examples of adjusting the Status Window.

Refer to the *ASG-ControlManager User's Guide* for details of User Defined Profiles.

Syntax

```
{STATUS} WINDOW [ [for-clause] [ {IS window-range}
{ST}              {DISPLAY} ] ] {;}
                  [for-clause [ {IS window-range} ] ]...
                  {PUSH
                   {POP}
                   {MAXIMUM} [ {DISPLAY
                              {MINIMUM} [ [for-clause [DISPLAY]] ] ] ] ] ]
```



```

where
for-clause is:
  FOR for-option [, for-option]...
  where
    for-option is:
      { SELECTION
        OUTPUT
        DIVERGING }
window-range is:
  { DICTIONARY
    ROOT
    BASE
    CURRENT
    BRANCH status-name
    ONLY status-id-clause }

if FOR for-option is only SELECTION and/or OUTPUT
then range may also be LATEST-VISIBLE-OCCURENCE

where status-id-clause is:
  { CURRENT [AND STATUSES name [, name]...] }
  { STATUSES name [, name]... }

```

Status Window Range

The Window Range, of each Window Type, determines the statuses in which the particular activities controlled by that Window Type, will operate.

Valid Window Ranges are as follows:

| Window Range | Description |
|--------------|---|
| DICTIONARY | Defines all statuses in the dictionary. Refer to Figure 9 on page 26. |
| ROOT | Defines all statuses in the current status hierarchy; that is, all statuses which have the same root status as the current status. Where there is only one root status in the dictionary, ROOT effectively defines the same range of statuses as DICTIONARY; refer to Figure 11 on page 31. However, if there are several root statuses in the dictionary ROOT defines the current status only; refer to refer to Figure 12 on page 31. |
| BASE | Defines the direct and indirect bases of the current status; the direct and indirect dependents of the current status' direct base (including the direct and indirect dependents of the current status). Refer to Figure 13 on page 32. |

| Window Range | Description |
|---------------------------|---|
| CURRENT | Defines the current status and its direct and indirect base and dependent statuses. Refer to Figure 14 on page 32. |
| ONLY status-id-clause | Defines named statuses only, where status-id-clause is CURRENT (that is, the current status only) and/or STATUSES followed by a status name or names. (Several status names may specified if they are separated by commas.) The keyword AND is provided in order that you may specify both CURRENT and STATUSES as CURRENT AND STATUSES status-name/s (in that order). |
| BRANCH status-name | Defines all statuses in the same branch of the status hierarchy as the named status; that is, its direct and indirect base and dependent statuses. Refer to Figure 15 on page 33. |
| LATEST-VISIBLE-OCCURRENCE | This is applicable to the Status Window for Selection and the Status Window for Output only. If this is the specified Window Range, then only the first occurrence of a member visible from the current status, will be processed by the commands to which the Window Type relates. Thus by specifying one Window Type, you can prevent the Status Window from processing all statuses in the dictionary for Selection and Output, without affecting the range of statuses processed for Diverging. |

As you can see, ROOT, BASE, CURRENT, and LATEST-VISIBLE- OCCURRENCE are all relative to the current status. If you move to another status these Window Ranges are automatically redefined to relate to the new current status. On the other hand, the range of statuses defined by DICTIONARY, ONLY status-id-clause, and BRANCH status-name does not change when you move to another status.

Note:

The range of statuses defined by the Window Range keywords are relative to maximum and minimum limits which may be imposed by the Systems Administrator.

Refer to "Maximum and Minimum Window Range" on page 33 for details of maximum and minimum limits imposed on your Status Window by the Systems Administrator.

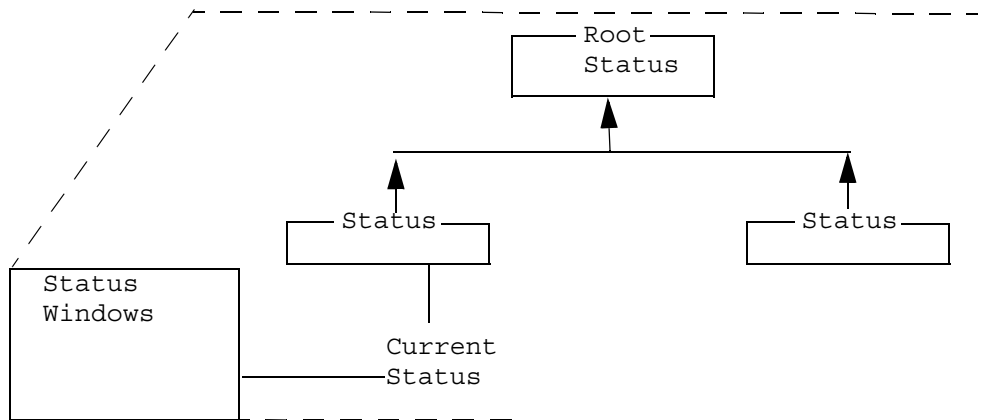


Figure 11. The Status Window Range defined by ROOT: Illustration 1

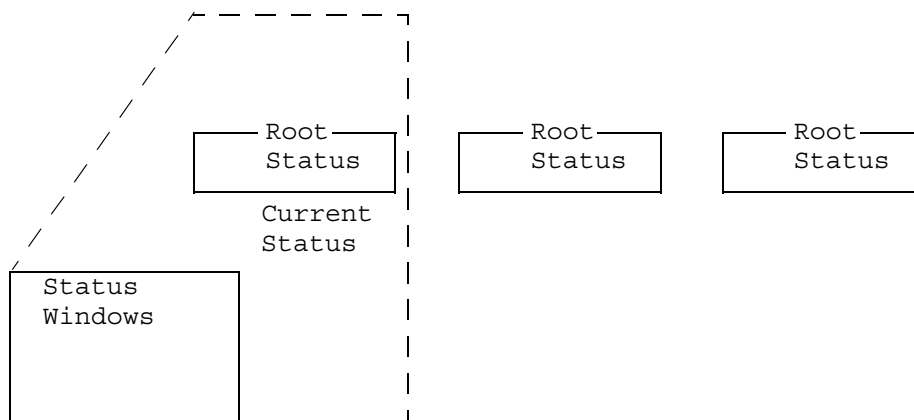


Figure 12. The Status Window Range defined by ROOT: Illustration 2

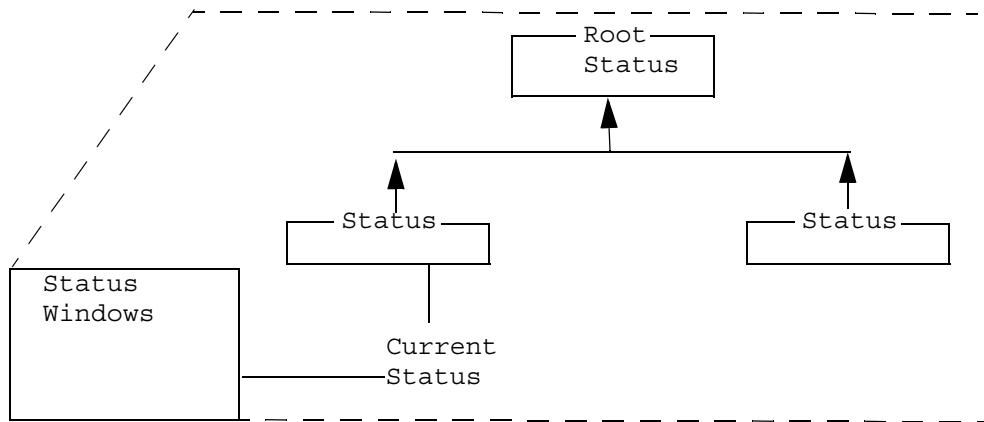


Figure 13. The Status Window Range defined by BASE

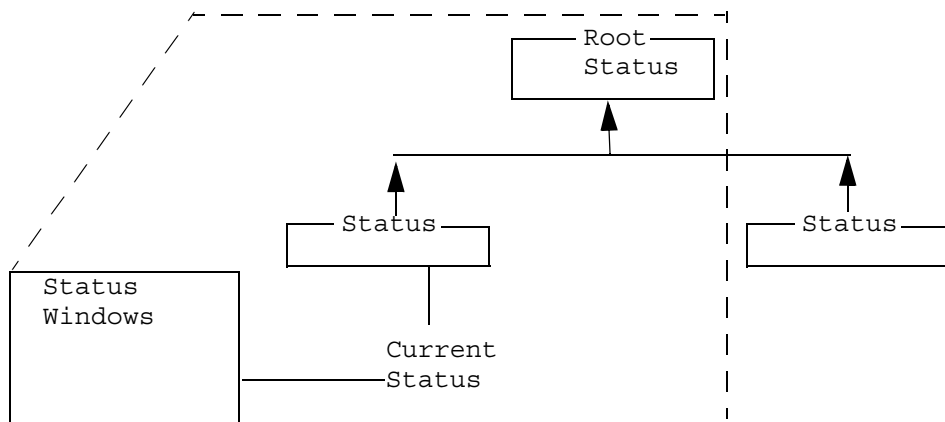


Figure 14. The Status Window Range defined by CURRENT

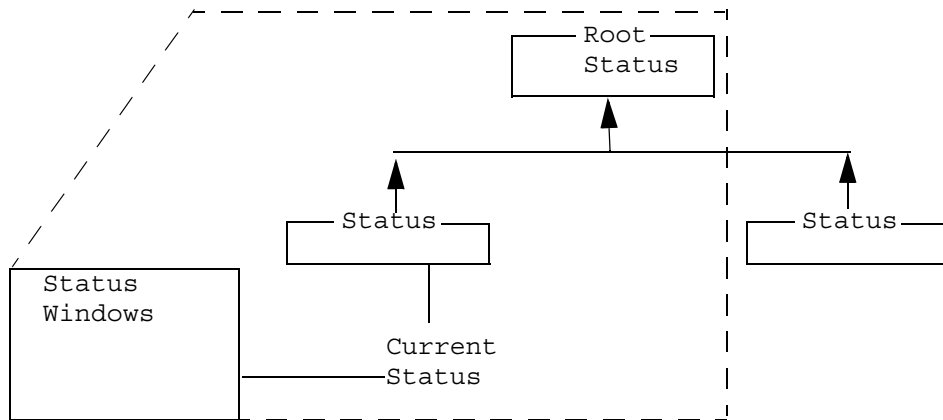


Figure 15. The Status Window Range defined by BRANCH status-name

Maximum and Minimum Window Range

The Systems Administrator can establish a maximum and minimum limit on the range of statuses that you may include in your Status Window. The Window Range of your Status Window may define a range of statuses within those limits—but it cannot exceed them.

If you enter a STATUS WINDOW command in which the window-range specified exceeds the limits imposed, the command is not rejected, but the limit is applied.

For example, you may specify your Status Window for Output as **DICTIONARY**.

However, if the Systems Administrator has set a maximum limit that allows all statuses in the current status hierarchy but disallows any other statuses, then that is the range of statuses effectively defined by **DICTIONARY**.

Similarly, if the Systems Administrator has established your minimum limit as all statuses in the current status hierarchy, then that is the range of statuses effectively defined by the Window Range keywords **BASE** and **CURRENT**.

The Systems Administrator may also impose a maximum limit on the statuses to which you have update access and those you can list (using the STATUS LIST command). So you may find you have read-only access to some statuses that other users may update and that you receive a different response when you list the statuses in the same dictionary.

This feature enables the Systems Administrator (in liaison with the dictionary Controller) to tailor your status environment to suit the work you are doing in the dictionary.

The STATUS WINDOW PUSH and POP Commands

To save a copy of your current Status Window, enter:

```
STATUS WINDOW PUSH ;
```

This pushes a copy of the current Status Window into the Status Window Stack.

To replace the current Status Window with the last copy that you pushed, enter:

```
STATUS WINDOW POP ;
```

The Status Window Stack can hold any number of copies.

To find out how many you are holding at any time, enter:

```
STATUS WINDOW DISPLAY ;
```

These commands enable you to adjust the Window Range of your Status Window during the processing of Executive Routines or Command Streams.

The STATUS WINDOW DISPLAY Command

To display your current Status Window enter:

```
STATUS WINDOW DISPLAY ;
```

This will display the current Window Range of each Window-Type in your Status Window.

The output produced by this command includes the number of copies of the Status Window currently saved in the Status Window Stack, if any.

The Default Status Window

This is the Default Status Window as supplied by ASG:

| | Window Type | Window Range |
|--------------------|-------------|---------------------------|
| Status Window For: | SELECTION | LATEST-VISIBLE-OCCURRENCE |
| | OUTPUT | DICTIONARY |
| | DIVERGING | DICTIONARY |

The activities controlled by each Window Type operate within the range of statuses defined by the Window Range.

The default supplied by ASG may be changed by the Systems Administrator via Logon Profiles, Global Profiles, and/or Corporate Executive Routines.

Whatever the effective default, you can change it (within maximum and minimum limits imposed by the Systems Administrator) to suit your own needs, by putting an appropriate STATUS WINDOW command into a User Defined Profile. The command will be executed automatically each time you log on to Manager Products.

Refer to the *ASG-ControlManager User's Guide* for details of User Defined Profiles.

Examples - Adjusting the Status Window

Below are examples of the effect of adjusting the Status Window for Selection, Output, and Diverging.

Adjusting the Status Window for Selection and Output

The following figures give examples of the effect, of adjusting the Status Window for Selection and Output, on the performance of the ALL-STATUSES keyword. The adjustments made in these examples would have exactly the same effect on the performance of the LIST HISTORY command.

For the following examples please assume, unless it is otherwise stated, that:

- All statuses illustrated are within any maximum and minimum limits established by the Systems Administrator on the range of statuses that may be included in the Status Window
- mem-1 exists only in the statuses indicated.

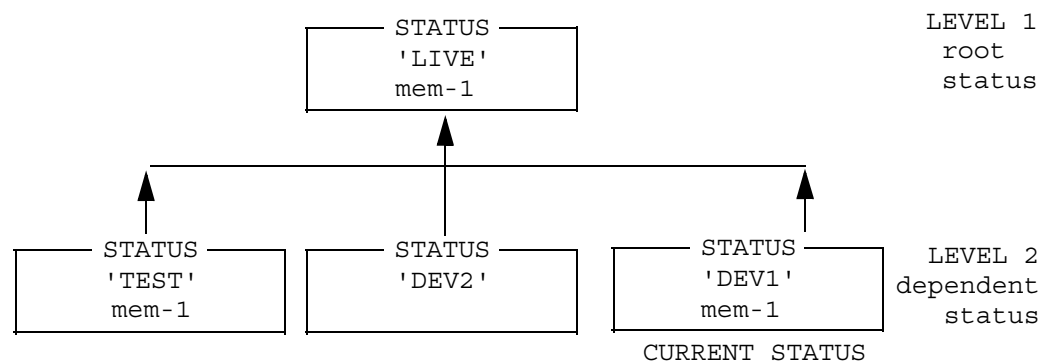


Figure 16. The Status Window: SELECTION and OUTPUT: Example 1

Example 1: The statuses in the dictionary are organized as represented in Figure 16 on page 35.

STATUS WINDOW FOR SELECTION IS LATEST-VISIBLE-OCCURRENCE ;

STATUS WINDOW FOR OUTPUT IS DICTIONARY ;

Command: LIST ALL-STATUSES ONLY MEM-1 ;

Response: mem-1 is selected from 'DEV 1'

Details are output from 'LIVE', 'TEST', and 'DEV1'.

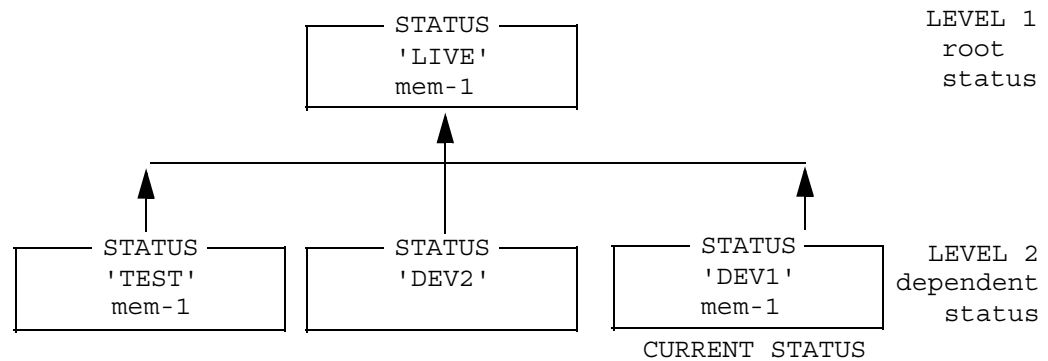


Figure 17. The Status Window: SELECTION and OUTPUT: Example 2

Example 2: The statuses in the dictionary are organized as represented in Figure 17 on page 36.

STATUS WINDOW FOR SELECTION IS LATEST-VISIBLE-OCCURRENCE ;

STATUS WINDOW FOR OUTPUT IS CURRENT ;

Command: LIST ALL-STATUSES ONLY MEM-1 ;

Response: mem-1 is selected from DEV1

Details are output from both LIVE and DEV1 but not from TEST.

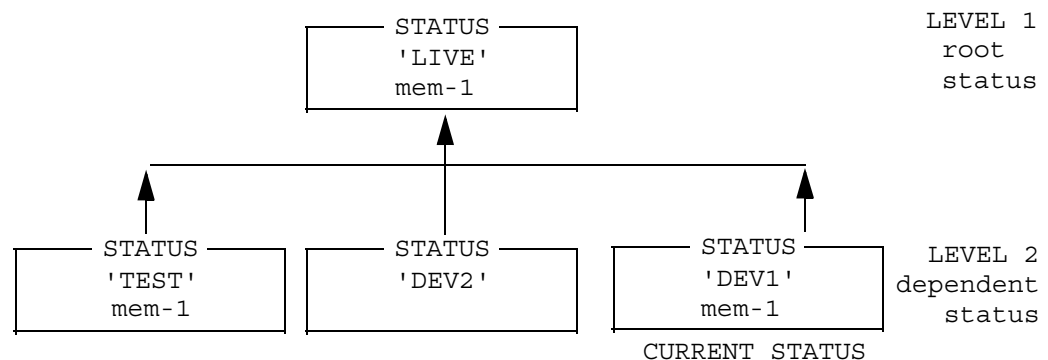


Figure 18. The Status Window: SELECTION and OUTPUT: Example 3

Example 3: The statuses in the dictionary are organized as represented in Figure 18 on page 36.

STATUS WINDOW FOR SELECTION, OUTPUT IS LATEST-VISIBLE-OCCURRENCE ;

Command: LIST ALL-STATUSES ONLY MEM-1 ;

Response: mem-1 is selected from DEV1

Details are output from DEV1 only.

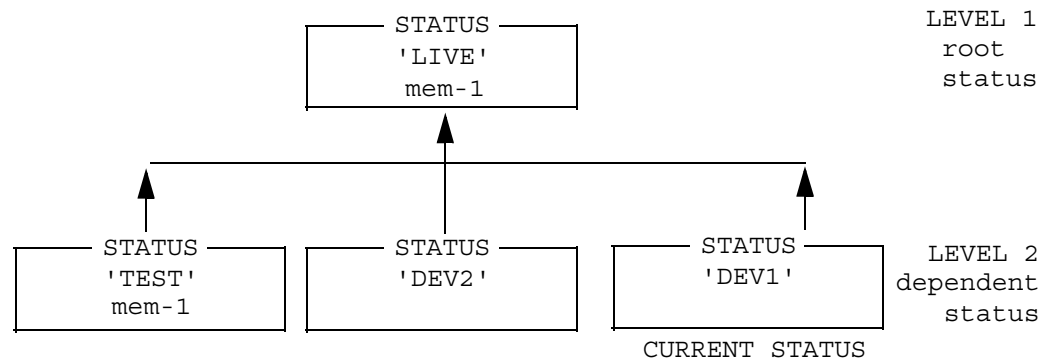


Figure 19 The Status Window: SELECTION and OUTPUT: Example 4

Example 4: The statuses in the dictionary are organized as represented in Figure 19 on page 37.

STATUS WINDOW FOR SELECTION, OUTPUT IS DICTIONARY ;

Command: LIST ALL-STATUSES ONLY MEM-1 ;

Response: mem-1 is selected from TEST

Details are output from TEST.

Comment: Although mem-1 is not visible from the current status it exists within the current Status Window.

Adjusting the Status Window for Diverging

The following figures give examples of the effect of adjusting status-related- selection keyword DIVERGING.

Refer to "DIVERGING" on page 15 for details of DIVERGING.

For the following examples please assume, unless it is otherwise stated, that:

- All statuses illustrated are within any maximum and minimum limits established by the Systems Administrator on the range of statuses that may be included in the Status Window
- mem-1 exists only in the statuses indicated as a FILE member type.

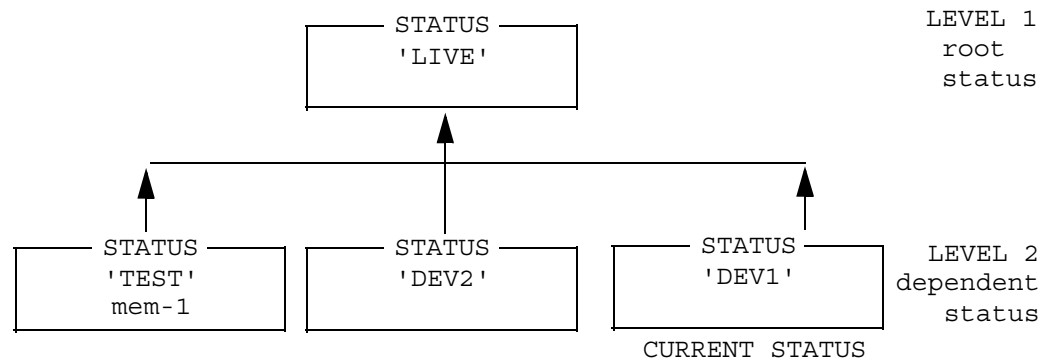


Figure 20. The Status Window: DIVERGING: Example 1

Example 1: The statuses in the dictionary are organized as represented in Figure 20 on page 38.

STATUS WINDOW FOR DIVERGING IS DICTIONARY ;

Command: LIST DIVERGING FILES ;

Response: mem-1 is selected.

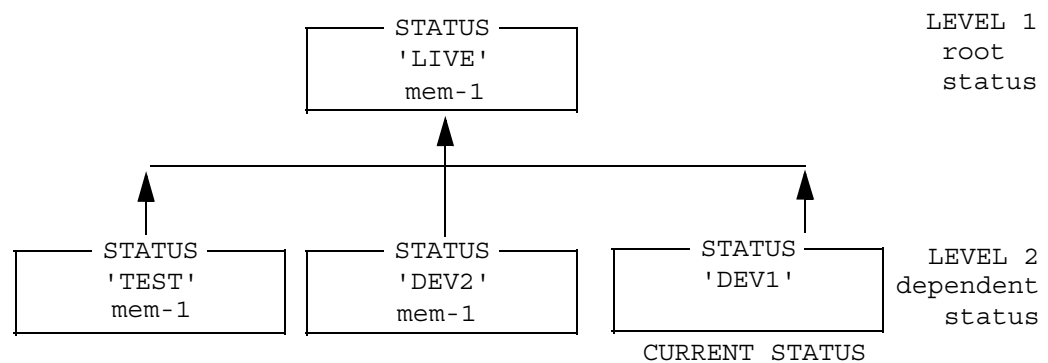


Figure 21. The Status Window: DIVERGING: Example 2

Example 2: The statuses in the dictionary are organized as represented in Figure 21 on page 38.

STATUS WINDOW FOR DIVERGING IS ONLY STATUSES DEV-1, DEV2 ;

Command: LIST DIVERGING FILES ;

Response: mem-1 is not selected.

Comment: The Status Window excludes 'TEST'.

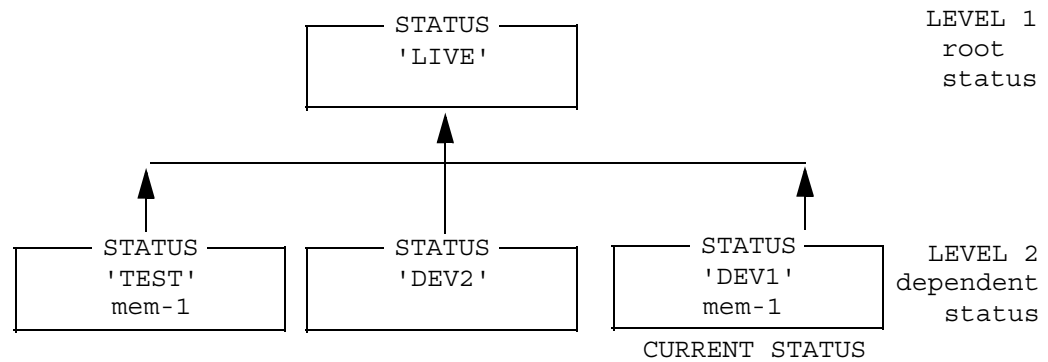


Figure 22. The Status Window: DIVERGING: Example 3

Example 3: The statuses in the dictionary are organized as represented in Figure 22 on page 39.

STATUS WINDOW IS DICTIONARY ;

Command: LIST ALL-STATUSES DIVERGING FILES ;

Response: mem-1 is selected

Details are output from TEST and DEV2.

Comment: Although mem-1 is not visible from the current status it is diverging in at least two statuses within the current Status Window for Diverging, and, it exists as a FILE member type in at least one status within the Status Window for Selection. Consequently, it is selected and details are output from every status in which it exists within the Status Window for Output.

4

Updating in a Status

Creating New Members in a Status

While you are working in an Update status you can add new members to the dictionary. The commands used are the same as those used when no Status facility is installed.

When you attempt to add a member to the dictionary using ADD, INSERT, or UPDATE and FILE commands, the name with which you attempt to add the member must not already exist in the dictionary. If it does, ControlManager will reject the addition in order to prevent duplicate member names being added to the dictionary. ControlManager will tell you which statuses the member exists in and in what condition (source, encoded, etc.).

In the above circumstances a member can be added using the RFILE command (when working interactively) or the REPLACE command (when working in batch or using an Executive Routine) to indicate that you want to replace the view of that member from the current status with something else. You must use these commands when you want to add a member that already exists in the current status and/or its direct and indirect dependent statuses status and when the member exists in a sibling status where it is not visible from the current status.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of the commands used to create a member.

Updating in a Status

Updating a Member

While you are working in an update status you can update any member that is visible from the current status. The commands used are the same as those used when no Status facility is installed.

If you update a member that is visible from, but does not exist in, the current status, ControlManager automatically copies that member's source record into the current Status when you FILE, SFILE, or RFILE the updates. (Until that time, any amendments are held in main storage and, just as when working without a Status facility, would be lost in the event of an abnormal end to the Manager Products session.)

If you are *updating a member in a base status* then the changes that you make must be valid in the context of any dependent statuses from which that member is visible.

Refer to the *ASG-Manager Products Status Concepts* manual for further details if you are unfamiliar with the concept of updating members visible from the current status.

Updating in a Base Status

When you update a member in a base status the changes that you make will affect any dependent statuses from which that member definition is visible.

Consequently, when you update a member in a base status ControlManager automatically checks any dependent status from which that member definition is visible, in order to ensure that the change being made is valid, in the context of those dependents.

ControlManager completes this validation whenever an update changes those parts of a member definition that affect its relationships with other members. This prevents an update in a base status resulting in illogical situations in its dependent statuses.

For example: an update that changes a GROUP member type to a FILE member type in a base status is invalid if that member is referred to by other GROUP member types in the statuses from which it is visible; that is, from the base statuses direct and/or indirect dependent statuses. It is invalid because a GROUP member type cannot refer to a FILE member type.

Refer to Figure 23 on page 42 for an illustration of the above example. If an update in LIVE changes the member type of ITEM-2 from ITEM to FILE, the member will fail to encode because the change is invalid as seen from DEV1 and DEV2.

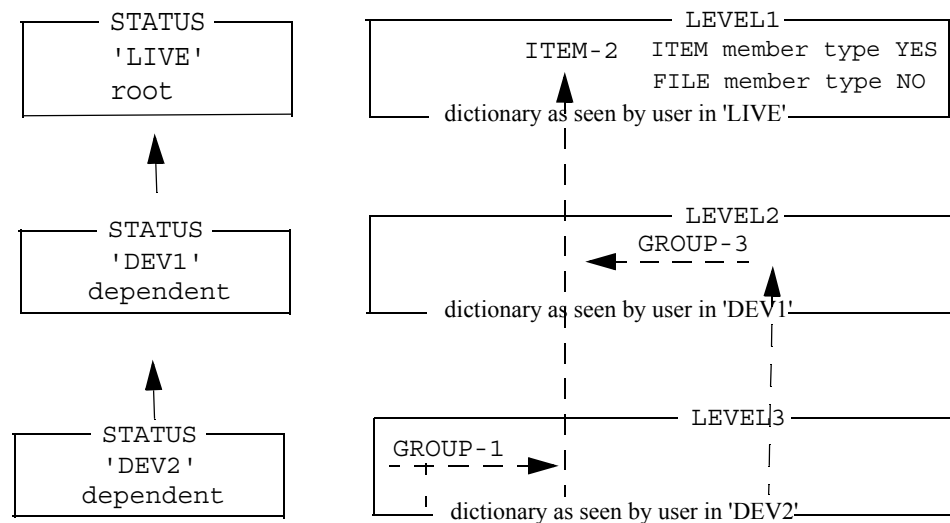


Figure 23. Invalid Update in a Base Status

You will not be able to encode an invalid update and ControlManager will issue warning messages naming each status in which the change is invalid.

If an update is urgently required but fails to encode because it is found to be invalid in dependent statuses, the update can be completed as follows:

1. Copy the original definition into each dependent status in which the update was found to be invalid using a COPY command with ENCODED-SOURCE, FROM and REPLACE options specified
2. Encode that definition in each dependent status
3. Retry encoding the updated version of the original definition in the base status.

Where an update does not affect those parts of a member definition which affect its relationship with other members the above validation process does not take place.

Refer to "Copying from One Status to Another" on page 43 for details of the COPY command.

Renaming Members

Renaming a member has the same effect as removing that member and adding a new member to the dictionary.

You can rename a member (using the RENAME command) in the current status if it is an update status and the member satisfies all of the following conditions:

- It is not referred to by any other member in any status
- It does not also exist in any other status
- The new name must not already exist in the dictionary.

Note: _____

You can copy a member's definition and create a new dictionary member with that copy using the COPY TO command. You could then remove the original member.

Copying from One Status to Another

To copy the source record of a member from a specified status into the current status, enter:

```
COPY member-name FROM status-name ;
```

where *member-name* must have a source record in the specified status.

For example:

```
COPY EMP-CODE FROM LIVE ;
```

If a definition (source record) for the specified member is already included in the view from the current status you must REPLACE it with the copied definition:

```
COPY member-name FROM status-name REPLACE ;
```

To copy a member from a specified status and create a new member with that copy in the current status, enter:

```
COPY member-name1 FROM status-name TO member-name2 ;
```

where:

member-name1 must have a source record in the specified status

member-name2 must not already exist in the current status or in its direct or indirect base or dependent statuses. If it does, you must specify REPLACE to complete the copy successfully. However, you need not specify REPLACE if it exists as dummy record only.

The order of the TO and FROM clauses is optional. For example:

```
COPY member-name1 FROM status-name TO member-name2 ;
```

may be entered as:

```
COPY member-name1 TO member-name2 FROM status-name ;
```

The ENCODED-SOURCE option is available when copying between statuses as it is when working without a Status facility.

Note: _____

The COPY command only copies source records and does not automatically encode them. If you want to encode the copy you must follow the COPY command with an ENCODE or MODIFY command, or else with UPDATE and then FILE.

Refer to *ASG-Manager Products Dictionary/Repository User's Guide* for details of the COPY command and for details of the condition (source, encoded, etc.) of dictionary members.

Removing Members

You can remove a member from the current status if it satisfies all of the following conditions:

- It is not referred to by another member in that status
- It does not also exist in a direct or indirect base status of the current status (if it has any) or if it does, then it is present in the current status as an unencoded source record only, in which case it may be removed and the definition held in the nearest direct or indirect base status will become visible from the current status.

Where the only condition preventing you from removing a member is that it also exists in a direct or indirect base of the current status (and it has an encoded record in the current status), you may be able to remove it using the REVERT command.

The REVERT command enables you to remove the definition of a member from the current status, thus allowing the definition held for that member, in the nearest direct or indirect base status, to be visible from the current status.

If the member that you want to remove is not referred to by other members in the same status, you can render it invisible by changing its member type to OBSOLETE-DEFINITION.

This has the effect of making the member invisible from the current status (effectively removing it without physically removing it) even if definitions for that member are held in its direct and/or indirect base statuses. And, the member will be invisible from the current status' direct and/or indirect dependent statuses.

OBSOLETE-DEFINITIONS are ignored by dictionary interrogation commands unless you deliberately specify the interrogate keyword OBSOLETE-DEFINITION or the selection criteria MEMBERS *member-name-list*.

So, where a member is defined in both a dependent status and its direct and/or indirect base statuses, you can effectively remove the member in the dependent status in two ways:

- Remove the definition from the dependent status and allow the definition in the base status to be seen from it
- Render the definitions for that member, in both the dependent and the base/s invisible from the dependent status,

provided that the conditions mentioned previously, apply.

Note: _____

The REINSTATE command enables you to remove unverified source records, thus reinstating a member in the condition it was in when last successfully encoded.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details of the any of the above mentioned commands and for details of OBSOLETE-DEFINITIONS.

The REVERT Command

Where a member in a base status has been redefined in a direct and/or indirect dependent status, this command enables you to remove the definition in the dependent status so that the definition recorded in the base status is again visible from the dependent status.

The syntax of the command is:

```
REVERT member-name ;
```

The command will not be accepted if the definition in the base status is inconsistent with the usage of the member in the current status. The command will be accepted if the definition in the base status would encode successfully if it were copied into the current status.

For example, if the member in the base status were a FILE member type and the member in the current status were an ITEM referred to by several GROUPs, a REVERT command for that member would be rejected.

If there is no definition for the specified member in the direct or indirect base statuses then a REVERT will act as a REMOVE command. It will then be subject to the conditions for removing members from a status.

5

The Effect of Status on Other Manager Products Commands

The PROTECT Command

Members specified in a PROTECT command are protected in all statuses in the dictionary in which they exist including update statuses.

KEPT-DATA Lists

Moving from one status to another does not affect the contents of a Kept-Data-List. However, only those index-names that are visible from the (new) current status will be processed by any command invoking the list except in the case of the PERFORM command.

The PERFORM Command

The PERFORM command executes one or more commands for each of a selection of members. The commands are generated for members in all statuses unless they are selected by type or by status. However the rules relating to the processing of members in a status are applied when each command relating to each member is executed. For example, if you enter:

```
PERFORM 'REPORT "*" ' INDEX-NAMES ;
```

a REPORT command is generated for each of the member/index-names in the dictionary, whether or not they are included in the view from the current status. However when each REPORT command is executed, only those commands in respect of members which are included in the view from the current status execute successfully.

The PERFORM command can be useful for copying members across non-base statuses.

```
PERFORM 'COPY "*" FROM status-name' selection ;
```

copies every specified/selected member from the specified status into the current status. For example:

```
PERFORM 'COPY "*" FROM PROD 'NEW ;
```

If you use a PERFORM command with a perform-character (* in the above example) and do not specify *selection*, ControlManager will not default to selecting all member/index-names visible from the specified status - it will reject the PERFORM command. To select all member/index-names visible from the specified status, specify *selection* as INDEX-NAMES.

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